

Asset and resource stranding as a consequence of the transition to a low-carbon energy economy. Assessing effects on the economic development of Uganda.

By

Kemitare Gladys Rochelle PEEG



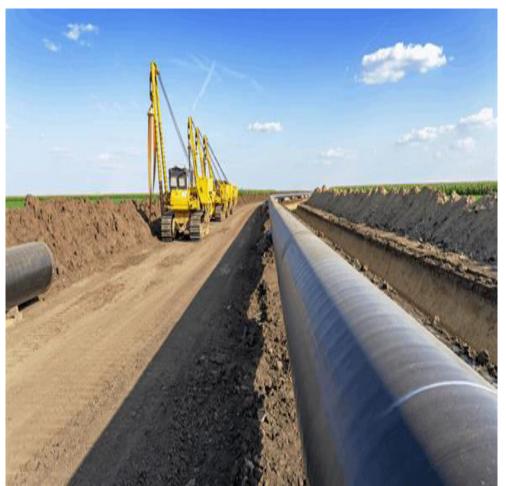
Background

- ➤ Over the past decade, both government and markets are prioritizing the movement from fossil fuel energy systems to clean energy systems as seen in over 170 countries across the world (UNFCCC, 2015).
- ➤ This new arrangement in energy transition is officially feasible and ready for enhanced adoption through renewable technologies (IRENA, 2021).
- As a result (Ite, 2020), there is likely to be a long –term global slump in demand for fossil fuels. (Cust, Manley, & Cecchinato, 2017).



- This decline according to Weber, Dordi, & Oyegunle (2020) will lead to stranded assets and resources
- ➤ Stranded assets are assets whose economic value is lost a head of their predicted useful life as a result of change in legislation which influences market forces, and disrupts innovation (Bos & Gupta, 2019)
- ➤ While stranded resources are resources that cannot be developed or extracted due to technological, regulatory, political or market hindrances as well as environmental norms. (Bos & Gupta, 2019)

Background







Brent delta oil rig



Background

- According (UNU-INRA, 2019),in Africa, governments are conflicted on whether to meet their development needs using the available natural resources or transition to achieve climate action
- For countries like Uganda, that recently heavily invested in the sector expecting high yields, this may not be achieved, leading to accumulated stranded assets. (Bos & Gupta, 2019)
- The research will aim to analyze the effects of stranded assets and resources as a result of energy transition, on the economic development of Uganda

Statement of the problem

- In order for countries to keep global warming below 2 degrees Celsius, there is a need to phase out fossil fuels, (McGlade & Ekins, 2015).
- ➤ This will lead to loss in profits worth \$13-\$17 trillion and an increase in stranded assets with three-quarters of them belonging to governments (Hansen, 2022).
- With increased stranded assets, problems like unemployment, loss in profits, and reduced tax income for governments incur (Auger, Trüby, Balcombe, & Staffell, 2021)

Statement of the problem

For countries like Uganda, they just recently discovered oil, (Bos & Gupta, 2019), this has left them in dilema between making losses from the production of fossil fuels or leaving them in the ground,. (Rempel & Gupta, 2021).

This study therefore seeks to assess the effects of stranded assets and resources as a result of energy transition, on the economic development of Uganda

Objectives of the study

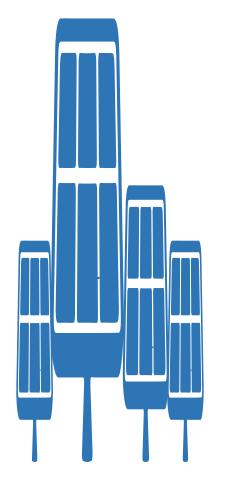
Main objective

To assess the effects of asset and resource stranding as a consequence of the transition to a low-carbon energy economy on the economic development of Uganda.

Specific objectives

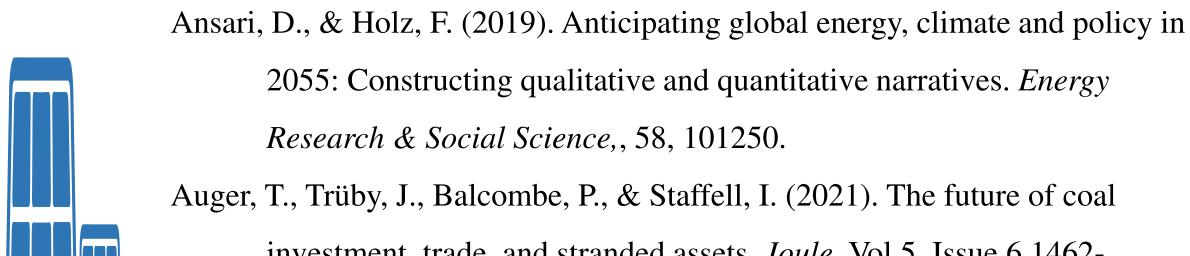
- > To assess the drivers of stranded assets and resources.
- To estimate the impact stranded assets and resources will have on Uganda's GDP.
- To investigate the policies, plans and frameworks have been put in place to mitigate against the risk of asset stranding on Uganda's economic development.

3.0 Methodology



- The researcher will employ both qualitative and quantative methods
- ➤ The qualitative analysis will build scenarios on Uganda's development path until 2050, taking into account energy, climate change, policy and the development dimensions.
- ➤ Quantitative energy modeling will quantify the energy transition pathways identified through the expert workshop and the desk research.
- Lastly the research will combine the quantitative results and qualitative scenarios to achieve a holistic narrative that analyses energy, climate and development (Ansari & Holz, 2019).

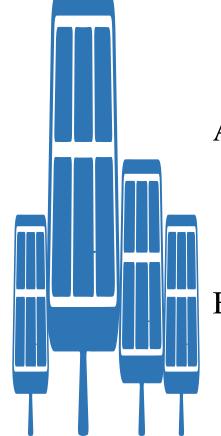
References



investment, trade, and stranded assets. *Joule*, Vol 5, Issue 6,1462-1484.

BOE. (2015). The impact of climate change on the UK insurance sector: A Climate Change Adaptation Report.

http://www.bankofengland.co.uk.



References

Bos, K., & Gupta, J. (2019). Stranded assets and stranded resources:

Implications for climate change mitigation and global sustainable

development. . Energy Research & Social Science, , 56, 101215.

Caldecott, B. (2011). Why high carbon investment could be the next sub-prime

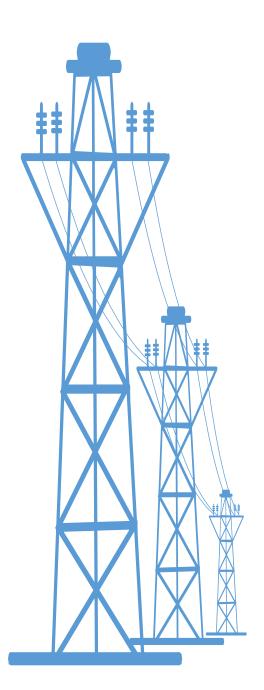
crisis. 12 July

https://www.theguardian.com/environment/2011/jul/12/high-carbon-

investment: The Guardian.

Cust, J., Manley, D., & Cecchinato, G. (2017). Unburnable wealth of nations.

Finance and Development, pp.2-5.



References.

Davis, S., & Socolow, R. H. (2014). Commitment accounting of CC emissions. *Environmental Research Letters*, 9 (2014) 084018: 1–9.

FSB. (2015). FSB to establish Task Force on Climate-related Financial Disclosures", press release of 4 December.

http://www.fsb.org/2015/12/fsb-to-establish-task-force-on-climate-related-financial-disclosures/.

GSE, & GORS. (2012). Introduction to Systems thinking. GSE; GORS.

Hansen, T. (2022). Stranded assets and reduced profits: Analyzing the economic underpinnings of the fossil fuel industry's resistance to climate stabilization. Renewable and Sustainable Energy Reviews, Vol 158,112144,https://doi.org/10.1016/j.rser.2022.112144.



THANK YOU FOR LISTENING